

## **THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application.

### Listing of Claims:

#### Claims 1-87 (Canceled)

Claim 88 (Previously presented): An antigenic composition consisting of an antigen and an effective adjuvanting amount of the combination of: (1) 3-O-deacylated monophosphoryl lipid A or monophosphoryl lipid A, and (2) granulocyte macrophage colony stimulating factor (GM-CSF), together with a diluent or carrier.

Claim 89 (Previously presented): The antigenic composition of claim 88, where the antigen is a polypeptide, peptide or fragment derived from a protein.

Claim 90 (Previously presented): The antigenic composition of claim 88, where 3-O-deacylated monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

#### Claims 91-97 (Canceled)

Claim 98 (Previously presented): The antigenic composition of claim 88, where the antigen is derived from a pathogenic virus.

Claim 99 (Withdrawn): The antigenic composition of claim 88, where the antigen is derived from a pathogenic bacterium.

Claim 100 (Withdrawn): The antigenic composition of claim 88, where the antigen is derived from a pathogenic fungus.

Claim 101 (Withdrawn): The antigenic composition of claim 88, where the antigen is derived from a pathogenic parasite.

Claim 102 (Withdrawn): The antigenic composition of claim 88, where the antigen is derived from a cancer cell or tumor cell.

Claim 103 (Withdrawn): The antigenic composition of claim 88, where the antigen is derived from an allergen.

Claim 104 (Withdrawn): The antigenic composition of claim 88, where the antigen is derived from A $\beta$  protein or peptide thereof, or an antibody thereto.

Claim 105 (Previously presented): A method for increasing the ability of an antigenic composition containing an antigen from a pathogenic virus to elicit an immune response in a vertebrate host against said pathogenic virus, which comprises administering to said host an antigenic composition of claim 98.

Claim 106 (Withdrawn): A method for increasing the ability of an antigenic composition containing a selected antigen from a pathogenic bacterium to elicit the immune response of a vertebrate host, which comprises administering to said host an antigenic composition of claim 99.

Claim 107 (Withdrawn): A method for increasing the ability of an antigenic composition containing a selected antigen from a pathogenic fungus to elicit the immune response of a vertebrate host, which comprises administering to said host an antigenic composition of claim 100.

Claim 108 (Withdrawn): A method for increasing the ability of an antigenic composition containing a selected antigen from a pathogenic parasite to elicit the immune response of a vertebrate host, which comprises administering to said host an antigenic composition of claim 101.

Claim 109 (Previously presented): A method for increasing the ability of an antigenic composition containing an antigen from a pathogenic virus to elicit cytotoxic T lymphocytes responses in a vertebrate host, which comprises administering to said host an antigenic composition of claim 98.

Claim 110 (Withdrawn): A method for increasing the ability of an antigenic composition containing a selected antigen from a pathogenic bacterium to elicit cytotoxic T lymphocytes in a vertebrate host, which comprises administering to said host an antigenic composition of claim 99.

Claim 111 (Withdrawn): A method for increasing the ability of an antigenic composition containing a selected antigen from a pathogenic fungus to elicit cytotoxic T lymphocytes

in a vertebrate host, which comprises administering to said host an antigenic composition of claim 100.

Claim 112 (Withdrawn): A method for increasing the ability of an antigenic composition containing a selected antigen from a pathogenic parasite to elicit cytotoxic T lymphocytes in a vertebrate host, which comprises administering to said host an antigenic composition of claim 101.

Claim 113 (Withdrawn): A method for increasing the ability of an antigenic composition containing a selected cancer antigen or tumor-associated antigen from a cancer cell or tumor cell to elicit a therapeutic or prophylactic anti-cancer effect in a vertebrate host, which comprises administering to said host an antigenic composition of claim 102.

Claim 114 (Withdrawn): A method for increasing the ability of an antigenic composition containing a selected allergen to moderate an allergic response in a vertebrate host, which comprises administering to said host an antigenic composition of claim 103.

Claim 115 (Withdrawn): A method for increasing the ability of an antigenic composition to prevent or treat disease characterized by amyloid deposition in a vertebrate host, which comprises administering to said host an antigenic composition of claim 104.

Claim 116 (Previously presented): The antigenic composition of claim 98, where the antigen is from human immunodeficiency virus (HIV).

Claim 117 (Previously presented): The antigenic composition of claim 116, where the HIV antigen is an HIV protein, polypeptide, peptide or fragment derived from said protein.

Claim 118 (Previously presented): The antigenic composition of Claim 117 where the antigen is the HIV peptide having the amino acid sequence:

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Cys Thr Arg Pro Asn Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:1), or

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Cys Thr Arg Pro Asn Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:2).

Claim 119 (Previously presented): The antigenic composition of claim 116, where 3-O-deacylated monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

Claims 120-126 (Canceled)

Claim 127 (Withdrawn): The antigenic composition of claim 98, where the selected antigen is from simian immunodeficiency virus (SIV).

Claim 128 (Withdrawn): The antigenic composition of claim 127, where the selected SIV antigen is an SIV protein, polypeptide, peptide or fragment derived from said protein.

Claim 129 (Withdrawn): The antigenic composition of claim 128, where the selected antigen is an SIV peptide selected from the peptides consisting of the amino acid sequences: Cys Thr Pro Tyr Asp Ile Asn Gln Met (SEQ ID NO:3), Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:4), Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:5), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Cys Thr Pro Tyr Asp Ile Asn Gln Met (SEQ ID NO:7), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:8) and Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:9).

Claim 130 (Withdrawn): The antigenic composition of claim 127, where 3-O-deacylated monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

Claims 131-137 (Canceled)

Claim 138 (Withdrawn): The antigenic composition of claim 99, where the selected antigen is from *Neisseria gonorrhoeae*.

Claim 139 (Withdrawn): The antigenic composition of claim 138, where the selected *Neisseria gonorrhoeae* antigen is a *Neisseria gonorrhoeae* protein, polypeptide, peptide or fragment derived from said protein.

Claim 140 (Withdrawn): The antigenic composition of claim 139, where the selected antigen is the *Neisseria gonorrhoeae* Porin B protein.

Claim 141 (Withdrawn): The antigenic composition of claim 138, where 3-O-deacylated monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

Claims 142-148 (Canceled)

Claim 149 (Withdrawn): The antigenic composition of claim 98, where the selected antigen is from human Respiratory syncytial virus (RSV).

Claim 150 (Withdrawn): The antigenic composition of claim 149, where the selected RSV antigen is an RSV protein, polypeptide, peptide or fragment derived from said protein.

Claim 151 (Withdrawn): The antigenic composition of claim 150, where the selected antigen is the RSV fusion (F) protein.

Claim 152 (Withdrawn): The antigenic composition of claim 149, where 3-O-deacylated monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

Claims 153-159 (Canceled)

Claim 160 (Previously presented): A method for increasing the ability of an antigenic composition containing an HIV antigen to elicit an immune response to said antigen in a vertebrate host, which comprises administering to said host an antigenic composition of claim 116.

Claim 161 (Canceled)

Claim 162 (Withdrawn): The method of claim 161, where the HIV antigen is the HIV peptide having the amino acid sequence:

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Cys Thr Arg Pro Asn  
Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID  
NO:1).

Claim 163 (Previously presented): The method of claim 160, where the HIV antigen is the HIV peptide having the amino acid sequence:

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Thr Arg Pro Asn Tyr  
Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:2).

Claim 164 (Previously presented): A method for increasing the ability of an antigenic composition containing an HIV antigen to elicit cytotoxic T lymphocyte responses in a vertebrate host, which comprises administering to said host an antigenic composition of claim 116.

Claim 165 (Canceled)

Claim 166 (Withdrawn): The method of claim 165, where the HIV antigen is the HIV peptide having the amino acid sequence:

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Cys Thr Arg Pro Asn Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:1).

Claim 167 (Previously presented): The method of claim 164, where the HIV antigen is the HIV peptide having the amino acid sequence:

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Thr Arg Pro Asn Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:2).

Claim 168 (Withdrawn): A method for increasing the ability of an antigenic composition containing an SIV antigen to elicit the immune response of a vertebrate host, which comprises administering to said host an antigenic composition of claim 127.

Claim 169 (Canceled)

Claim 170 (Withdrawn): The method of claim 169, where the SIV antigen is an SIV peptide selected from the peptides consisting of the amino acid sequences: Cys Thr Pro Tyr Asp Ile Asn Gln Met (SEQ ID NO:3), Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:4), Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:5), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Cys Thr Pro Tyr Asp Ile Asn Gln Met (SEQ ID NO:7), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:8) and Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:9).

Claim 171 (Withdrawn): A method for increasing the ability of an antigenic composition containing an SIV antigen to elicit cytotoxic T lymphocytes in a vertebrate host, which comprises administering to said host an antigenic composition of claim 127.

Claim 172 (Canceled)

Claim 173 (Withdrawn): The method of claim 172, where the SIV antigen is an SIV peptide selected from the peptides consisting of the amino acid sequences: Cys Thr Pro Tyr Asp Ile Asn Gln Met (SEQ ID NO:3), Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:4), Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:5), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Cys Thr Pro Tyr Asp Ile Asn Gln Met

(SEQ ID NO:7), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:8) and Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:9).

Claim 174 (Withdrawn): A method for increasing the ability of an antigenic composition containing a *Neisseria gonorrhoeae* antigen to elicit the immune response of a vertebrate host, which comprises administering to said host an antigenic composition of claim 138.

Claim 175 (Canceled)

Claim 176 (Withdrawn): The method of claim 175, where the *Neisseria gonorrhoeae* antigen is the *Neisseria gonorrhoeae* Porin B protein.

Claim 177 (Withdrawn): A method for increasing the ability of an antigenic composition containing a *Neisseria gonorrhoeae* antigen to elicit cytotoxic T lymphocytes in a vertebrate host, which comprises administering to said host an antigenic composition of claim 138.

Claim 178 (Canceled)

Claim 179 (Withdrawn): The method of claim 178, where the *Neisseria gonorrhoeae* antigen is the *Neisseria gonorrhoeae* Porin B protein.

Claim 180 (Withdrawn): A method for increasing the ability of an antigenic composition containing a human Respiratory syncytial virus (RSV) antigen to elicit the immune response of a vertebrate host, which comprises administering to said host an antigenic composition of claim 149.

Claim 181 (Canceled)

Claim 182 (Withdrawn): The method of claim 181, where the RSV antigen is the RSV fusion (F) protein.

Claim 183 (Withdrawn): A method for increasing the ability of an antigenic composition containing an RSV antigen to elicit cytotoxic T lymphocytes in a vertebrate host, which comprises administering to said host an antigenic composition of claim 149.

Claim 184 (Canceled)

Claim 185 (Withdrawn): The method of claim 184, where the RSV antigen is the RSV fusion (F) protein.

Claim 186 (Withdrawn): An antigenic composition consisting of an antigen and an effective adjuvanting amount of the combination of: (1) 3-O-deacylated monophosphoryl lipid A or monophosphoryl lipid A, and (2) interleukin-12 (IL-12), together with a diluent or carrier.

Claim 187 (Withdrawn): The antigenic composition of claim 186, where the antigen is a polypeptide, peptide or fragment derived from a protein.

Claim 188 (Withdrawn): The antigenic composition of claim 186, where 3-O-deacylated monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

Claim 189 (Withdrawn): The antigenic composition of claim 186, where the antigen is derived from a pathogenic virus.

Claim 190 (Withdrawn): A method for increasing the ability of an antigenic composition containing an antigen from a pathogenic virus to elicit an immune response in a vertebrate host against said pathogenic virus, which comprises administering to said host an antigenic composition of claim 189.

Claim 191 (Withdrawn): A method for increasing the ability of an antigenic composition containing an antigen from a pathogenic virus to elicit cytotoxic T lymphocytes responses in a vertebrate host, which comprises administering to said host an antigenic composition of claim 189.

Claim 192 (Withdrawn): The antigenic composition of claim 189, where the antigen is from human immunodeficiency virus (HIV).

Claim 193 (Withdrawn): The antigenic composition of claim 192, where the HIV antigen is an HIV protein, polypeptide, peptide or fragment derived from said protein.

Claim 194 (Withdrawn): The antigenic composition of Claim 193 where the antigen is the HIV peptide having the amino acid sequence:



Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Cys Thr Arg Pro Asn  
Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID  
NO:1), or

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Cys Thr Arg Pro Asn  
Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID  
NO:2).

Claim 195 (Withdrawn): The antigenic composition of claim 192, where 3-O-deacylated  
monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

Claim 196 (Withdrawn): A method for increasing the ability of an antigenic composition  
containing an HIV antigen to elicit an immune response to said antigen in a vertebrate  
host, which comprises administering to said host an antigenic composition of claim 192.

Claim 197 (Withdrawn): The method of claim 196, where the HIV antigen is the HIV  
peptide having the amino acid sequence:

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Thr Arg Pro Asn Tyr  
Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:2).

Claim 198 (Withdrawn): A method for increasing the ability of an antigenic composition  
containing an HIV antigen to elicit cytotoxic T lymphocyte responses in a vertebrate host,  
which comprises administering to said host an antigenic composition of claim 192.

Claim 199 (Withdrawn): The method of claim 198, where the HIV antigen is the HIV  
peptide having the amino acid sequence:

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Thr Arg Pro Asn Tyr  
Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:2).